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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,986	02/02/2001	Arthur Blank	Blank et alPA-1	7259
7590 11/03/2005			EXAMINER	
Royal W. Craig			WONG, LESLIE	
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10 North Celvert Street			ART UNIT	PAPER NUMBER
Suite 153			2164	
Baltimore, MD 21202			DATE MAILED: 11/03/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/775,986	BLANK ET AL.				
Office Action Summary	Examiner	Art Unit				
	Chongshan Chen	2162				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>06 J</u>	ulv 2004.					
	s action is non-final.					
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims	•					
4)⊠ Claim(s) <u>1-4,7-12 and 15-19</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-4,7-12 and 15-19</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
_	ar	•				
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>						
3. ☐ Copies of the certified copies of the prior	• •	-				
application from the International Burea	•	ed in this National Stage				
• •	• • • • • • • • • • • • • • • • • • • •	ed				
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  6) Other:						
	o,					

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#### **DETAILED ACTION**

1. After carefully review the applicant arguments, the Office withdraws the Finality of the Office Action dated on September 23, 2003. The Office regrets any inconveniences due to the applicant. Claims 1-4, 7-12 and 15-19 are pending in this application.

### Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-4, 7-12 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutcliffe et al. ("Sutcliffe", 6,052,122) in view of Help: CLARIT Negative Weights (hereinafter "Clarit", National Environmental Publications Internet Site (NEPIS), "Help: CLARIT Negative Weights",

http://web.archive.org/web/19990823102810/www.epa.gov/clhtml/h-neg-wts.html
and http://web.archive.org/web/19991004171040/http://www.epa.gov/clhtml/h-weight.html
those sites and documents are available since October 4, 1999 according to
http://www.archive.org/).

As per claim 1, Sutcliffe teaches a method for matching one set of wants with a database of profiles based on cross-matching of corresponding want data to profile data, comprising the steps of:

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compiling a database of registration records each identifying and describing actual characteristics of an entity (Sutcliffe, Fig. 1, 22, User Information Database, Fig. 3A, 200, Obtain and store characteristic and criteria data for users of the system in a user database);

compiling a query record comprising desired characteristics of an entity and incremental preference rankings associated with said desired characteristics by prompting a user to enter subjective data identifying and describing their wants by a series of online forms displaying a range of discrete choices for each data element, plus a range of user-selectable preference levels for each data element (Sutcliffe, Fig. 2A-2B, Fig. 3A, 204, Define a search string to match characteristic and criteria data of the first user and other users of the system, col. 5, line 28 – col. 6, line 6);

matching said actual characteristics with said desired characteristics and assigning a positive integer numerical score for each match that increases in accordance with an increasing preference ranking, assigning a nominal positive numerical score for each match designated nopreference (Sutcliffe, col. 9, line 25 – col. 10, line 19, "the user can choose a weight to be assigned to each criteria data element. Thus, for each criteria data element that matches a corresponding characteristic data element of another user a number of points corresponding to the weight would be added to a running total", col. 5, lines 57-59, "criteria data provide choices such as *no preference, never*, ..."); and

totaling said, scores to prioritize the closest registration records based on said query record (Sutcliffe, col. 9, lines 59-65, "Each would have a point total associated therewith. Some number of the highest point totals, ten or fifty for example, can be saved. The user information

corresponding to the other users having the highest point total is provided to the first user so that the first user can contact the respective other users").

Sutcliffe does not explicitly disclose assigning a zero or negative score to each nonmatch. Clarit teaches assigning a zero or negative score to each non-match (Clarit, page 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the match system of Sutcliffe by incorporating the zero and negative weight method as disclosed by Clarit. The motivation being to help the user to find the better result according to the user's preference.

As per claim 2, Sutcliffe and Clarit teach all the claimed subject matters as discussed in claim 1, and further disclose assigning a score for each non-match that is weighted in accordance with said preference ranking (Clarit, page 1-3).

As per claim 3, Sutcliffe and Clarit teach all the claimed subject matters as discussed in claim 1, and further disclose said database of registration records identify and describe actual characteristics of people, and said step of compiling a database of registration records further comprises prompting successive users to each enter a profile of objective data identifying and describing themselves by a series of online forms presented to said users by a computer (Sutcliffe, Fig. 1, col. 5, lines 28-64).

As per claim 4, Sutcliffe and Clarit teach all the claimed subject matters as discussed in claim 3, and further disclose prompting a user to enter subjective data identifying and describing their wants by a series of online forms presented to said user by a computer, plus prompting said user to enter a subjective preference ranking associated with each want data element to indicate importance thereof (Sutcliffe, Fig. 4, col. 5, lines 28-64, col. 9, lines 55-65).

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As per claim 8, Sutcliffe and Clarit teach all the claimed subject matters as discussed in claim 6, and further disclose said user-selectable preference levels are assigned numerical values (Sutcliffe, col. 9, line lines 25-35).

As per claim 9, Sutcliffe and Clarit teach all the claimed subject matters as discussed in claim 8, and further disclose assigning weight to criteria data elements to find the closest match (Sutcliffe, col. 5, line 28 – col. 6, line 6, col. 9, line 25 - col. 10, line 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to assign numerical values are as follows: "must"=1, "strongly want"=2, "want"=3, "don't care or no preference"=4, "don't want "=5, "strongly don't want "=6 and "must not be"=7 in order to find the best match the user desired.

As per claim 10, Sutcliffe and Clarit teach all the claimed subject matters as discussed in claim 8, and further disclose said step of matching said actual characteristics with said desired characteristics by assigning a score for each match that is weighted in accordance with said preference ranking further comprises assigning a maximum score for each positive comparison of query data with profile record when said preference ranking is equivalent to "must" or "must not be" (Sutcliffe, Fig. 2A & 2B, col. 5, line 28 – col. 6, line 6, col. 9, line 25 - col. 10, line 19).

As per claim 11, Sutcliffe and Clarit teach all the claimed subject matters as discussed in claim 10, and further disclose said step of matching said actual characteristics with said desired characteristics by assigning a score for each match that is weighted in accordance with said

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preference ranking further comprises assigning a minimum score for each positive comparison of query data with profile record when said preference ranking is equivalent to "don't care or no preference" (Sutcliffe, Fig. 2A & 2B, col. 5, lines 65-67, col. 9, line 25 - col. 10, line 18).

As per claim 12, Sutcliffe teaches an automated system for matching a set of desired subjective characteristics to a most suitable profile of actual objective characteristics from among a database of such objective profiles, comprising:

a database of profile records each comprising a collection of data elements describing actual objective characteristics of an entity (Sutcliffe, Fig. 1, 22, User Information Database, Fig. 3A, 200, Obtain and store characteristic and criteria data for users of the system in a user database);

a succession of computer forms navigable by a graphical user interface for prompting a user to enter a query record describing desired characteristics of an entity, said query record including a plurality of incremental preference rankings associated with said desired characteristics (Sutcliffe, Fig. 1, 3A & 3B, col. 2, lines 30-67, col. 9, line 25 - col. 10, line 19);

a computer software matching engine for scoring the conformity of the query record of desired characteristics with said profile records of actual characteristics based on correspondence of said data records as statistically weighted by said preference rankings, said matching engine assigning a positive integer numerical score for each match that increases in accordance with an increasing preference ranking, assigning a nominal positive numerical score for each match designated no-preference, said matching engine then totaling said scores (Sutcliffe, col. 9, line 25 – col. 10, line 19, col. 5, line 28 – col. 6, line 6); and

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an output display for displaying a list of profile records that conform to said query record in prioritized order of the matching engine score (Sutcliffe, Fig. 1 & 4, col. 3, lines 1-3).

Sutcliffe does not explicitly disclose assigning a zero or negative score to each non-match. Clarit teaches assigning a zero or negative score to each non-match (Clarit, page 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the match system of Sutcliffe by incorporating the zero and negative weight method as disclosed by Clarit. The motivation being to help the user to find the better result according to the user's preference.

As per claim 15, Sutcliffe and Clarit teach all the claimed subject matters as discussed in claim 13, and further disclose said profile records each identify and describe actual characteristics of people (Sutcliffe, Fig. 3A, col. 2, lines 30-54).

As per claim 16, Sutcliffe and Clarit teach all the claimed subject matters as discussed in claim 15, and further disclose said query records include subjective data identifying and describing a user's wants plus a subjective preference ranking associated with each want to indicate importance thereof (Sutcliffe, Fig. 3A & 3B, col. 9, line 55 - col. 10, line 19).

As per claim 17, Sutcliffe and Clarit teach all the claimed subject matters as discussed in claim 16, and further disclose said succession of computer forms prompts a user to enter subjective data identifying and describing their wants by displaying a range of discrete choices for each data element, plus a range of user-selectable preference levels for each data element (Sutcliffe, Fig. 2A & 2B, col. 5, line 28 – col. 6, line 6).

Claim 18 is rejected on grounds corresponding to the reasons given above for claim 6.

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As per claim 19, Sutcliffe and Clarit teach all the claimed subject matters as discussed in claim 17, and further disclose user-selectable preference levels further comprise at least seven discrete preference levels (Sutcliffe, col. 9, lines 25-30).

## Response to Arguments

4. Applicant's arguments with respect to claims 1-4, 7-12 and 15-19 have been considered but are most in view of the new ground(s) of rejection.

#### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is (571) 272-4031. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chongshan Chen October 28, 2005